and incidence of adverse events during hospitalization was documented.

RESULTS Of 65 patients, 52 cases were through the transradial approach and 13 cases through the femoral artery. There were 40 cases of the CTO lesions, 10 cases of the bifurcation lesionss, 6 cases of severely calcified lesions, and 9 cases of the seriously tortuosity of the coronary artery. In this case, positive guide wire was used with conventional methods in all patients, but failed to cross the coronary lesions. So the 135 cm Corsair microcatheter was applied. Of CTO lesions in 40 cases, after the application of Corsair microcatheter, positive guide wire crossed the CTO lesions in 33 patients and success recanalization of CTO were finally achieved in 29 (72.5%) patients. The success rate for crossing the bifurcation lesions by the Corsair microcatheter was 90% in 9 out of 10 patients and PCI was success finally in 9 (90%) patients.

Of 6 cases of severely calcified lesions, guide wire crossed the lesion in 5 patients after the application of Corsair microcatheter and PCI was success in 6 (100%) patients. Of 9 cases of the seriously tortuosity of the coronary artery, guide wire crossed the lesion in 9 patients after the application of Corsair microcatheter and PCI was success in 9 (100%) patients. There was no complications related to Corsair microcatheter during the index procedure, no major adverse cardiac events during in-hospital clinical follow-up.

CONCLUSIONS Corsair microcatheter is safe and effective in the recanalization for complex coronary lesions when guide wire with conventional methods could not cross them. It can facilitate guidewire passage and increase the success rate of PCI.

GW26-e3552

Prognosis of Anti-Helicobacter Pylori Treatment and Acute Coronary Syndrome

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OBJECTIVES To investigate Prognosis of Anti-Helicobacter Pylori Treatment and Acute Coronary Syndrome, to provide a reference for future treatment.

METHODS We selected 200 patients with acute coronary syndrome who were treated in our hospital during October 2011 - October 2013, and divided into the Control Group and the Observation Group by the treatment. The Control Group was received conventional therapy, while the Observation Group was received treatment with Omeprazole + clarithromycin + amoxicillin. Then compared and analyzed the clinical effect of the both of groups, at the same time, counted the number of cases of coronary recurrence.

RESULTS The total efficiency after treatment, CHD events followed up six months later, readmission rates, mental function, physical function, social function, physical status and quality of life of both of groups have been compared. As a result, the difference between the two groups showed statistically significant, $P < 0.05$. 13 cases out of the Observation Group occurred adverse reactions during the treatment, all of patients tolerated and the symptoms disappeared after treatment.

CONCLUSIONS Eradication of H. pylori can improve treatment effect of patient with acute coronary syndrome, reduce hospitalization rates in patients in the short term, and hence has a good improvement on the prognosis of the disease.

GW26-e3964

Remnant cholesterol predicts periprocedural myocardial injury following percutaneous coronary intervention in poorly-controlled type 2 diabetes

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OBJECTIVES Previous studies demonstrated that elevated remnant cholesterol (RC) was a useful predictor of cardiovascular disease. Patients with type 2 diabetes (T2D) following percutaneous coronary intervention (PCI) had worse prognosis, especially in poorly-controlled T2D. However, whether RC was associated with periprocedural myocardial injury (PMI) following PCI in patients with T2D is currently unknown. This study tried to explore the association of preprocedural RC and the ratio of RC to HDL cholesterol (RC/HDL-C) levels with peak cTnI values after PCI in patients with T2D.

METHODS We prospectively enrolled 1182 consecutive T2D patients with normal preprocedural cTnI undergoing PCI. Patients were divided into the two groups: group A [glycated hemoglobin (HbA1c) <7%, n=563] and group B (HbA1c ≥7%, n=619). PMI was evaluated by cTnI analysis within 24h.

RESULTS Patients in group B, a 1-SD increase in RC produced a 32% increased risk of postprocedural cTnI >3× upper limit of normal (ULN) or >5× ULN. For RC/HDL-C, the causal odds ratio was 1.49 (95% confidence interval [CI]: 1.12 to 1.99) and 1.51 (95% CI: 1.13 to 2.01) in group B with postprocedural cTnI >3× ULN and >5× ULN, respectively. However, group A patients were no affected. Furthermore, patients with RC levels >27.46 mg/dl (third tertile) compared with RC levels ≤14.15 mg/dl (first tertile) were associated with a 59% and 96% increased risk of postprocedural cTnI > 3× ULN and >5× ULN in group B, respectively.

CONCLUSIONS RC and RC/HDL-C are the valuable, independent predictors for PMI in poorly-controlled diabetic patients undergoing PCI.

GW26-e4714

Impact of Postoperative Anemia on Exercise Capacity Recovery in Patients Underwent Coronary Artery Bypass Surgery

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OBJECTIVES Postoperative anemia (PPA) is a common complication after the coronary artery bypass surgery (CABG). Since the blood transfusion was not suggested in the updated clinical guideline, PPA would be more prevalent. Whether PPA leaded to poor exercise capacity recovery in CABG patients after their discharge was still unclear. The purpose of this study was to explore the impact of postoperative anemia on exercise capacity in patients underwent CABG.

METHODS This is an observational cohort study. Patients underwent CABG from Jan. to Dec. 2014 and completed cardiopulmonary exercise test (CPX) after discharge were included. Those who have had anemia before operation were excluded. Based on the last concentration of hemoglobin (Hb) data before discharge subjects' Hb <11 g/dL were defined as severe group. The others did not have significant low Hb data, Hb ≧11 g/dL, were mild group. Subjects received CPX at discharge and three months after discharge. Exercise capacity, represented by peak oxygen consumption (VO_2), and exercise responses, including heart rate (HR), blood pressure (BP), oxygen pulse (O_2 pulse), dead space (VD/VT) and ventilation (VE) were acquired from CPX. T-test and Chi-square were used to compare the baseline demographic data. Two-way RM-ANOVA was used to compare the exercise capacity recovery through time and between groups. The significant level was set at $p<0.05$.

RESULTS Thirty-seven subjects (73.0% male, 64.1±7.6 year-old) were included for analysis. The Hb ranged from 8.3 to 12.6 g/dL (mean value 10.6±1.2 g/dL). There were 16 (43.2%) patients in mild group; 21(56.8%) in severe group. The exercise capacity of both groups had significantly improvement through time ($p=0.001$), and no significant difference between groups ($p=0.616$). The VO_2 value at 3 months after discharge of mild and severe group were 23.3±6.1 and 20.9±5.8 ml/Kg/min, respectively. Both groups showed better exercise performance at 3 months after discharge, suggested of higher peak HR ($p=0.006$), higher peak systolic BP ($p=0.033$) and lower VD/VT ($p=0.008$). The improvements showed no significant difference between 2 groups.

CONCLUSIONS Postoperative anemia during hospitalization had no notable impact on the exercise capacity recovery in patients underwent CABG. Subjects even had moderate or severe anemia would have equivalent improvement at 3 months after discharge.

GW26-e0719

Application of small-diameter balloon at side branch in percutaneous coronary intervention for coronary bifurcation lesions

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OBJECTIVES To evaluate the clinical efficacy and security of small-diameter balloon at side branch in dealing with coronary bifurcation lesions.

METHODS 32 patients with 36 true coronary bifurcated lesions treated by percutaneous coronary intervention (PCI), were enrolled. The diameters of side branch were less than 2.25mm. Before balloon pre-dilation at main branch, small-diameter balloon reserved at side branch, whose diameter were smaller 0.25-0.5mm than the diameter of side branch, the expanded proximal of which completely covers the opening. When the stent at main branch was implanted, the small-diameter balloon was expanded at an about 6atm pressure. Then reserve the balloon at main branch and guide wire in side branch, after that withdrawal the small-diameter balloon at side branch. Finally, open the balloon at main branch again in situ and release pressure. The following acute post-stenting vessel complications were assessed: stenosis of side branch, surgical success rate and the incidence of major adverse cardiovascular events.

RESULTS Before the withdrawal of the side branch balloon, stents delivered into the main branch, the stenosis of side branch did not aggravate, TIMI flow of grade 3. While after the withdrawal of the side branch balloon and stent balloon dilatation to release the pressure again in place, 3 side branch were more stenosis than before and TIMI flow was grade 2. The surgical success rate was 97%. Besides, there did not occur major adverse cardiovascular events.

CONCLUSIONS For the patients with coronary bifurcation lesions, the balloon at side branch had little effect on the side branch. It's suggested that small-diameter balloon at side branch for completion of stenting of bifurcation lesions could be safe and effective.

GW26-e1010

Effects of hydration with Shenfu Injection intervention on contrast-induced nephropathy in acute coronary syndrome patients undergoing percutaneous coronary intervention

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OBJECTIVES To evaluate the safety and efficacy of Shenfu injection in prevention of contrast- induced nephropathy (CIN) in acute coronary syndrome (ACS) patients undergoing percutaneous coronary intervention (PCI).

METHODS A single - center prospective randomized controlled trial was performed, 148 ACS patients undergoing PCI were divided randomly into groups control (n =74, receiving only 0.9% sodium chloride solution for routine hydration) and intervention (n =74, based on routine hydration receiving Shenfu injection). Serum creatinine, BUN and urinary Neutrophil gelatinase associated lipocalin(NGAL) were checked at start, 1 day and 2 days after PCI.

RESULTS Among the 148 patients studied, 14 (9.4%) experienced CIN after procedure. CIN occurred in 2.7% of the Shenfu Injection group and 16.2 % of the control ($P < 0.05$). The incidence of CIN was lower in intervention group than in control. No serious adverse effects were observed in all patients. There is no difference between the level of Scr and eGFR level in the two groups. but in 12h later afetr PCI, the urinary NGAL level in control group was significantly higher than in Shenfu Injection group ($P<0.05$).

CONCLUSIONS Hydration combined with Shenfu Injection is more effective than hydration with sodium chloride in the prevention of CIN in ACS patients undergoing PCI.

GW26-e3871

Outcomes of Percutaneous Coronary Intervention in Patients ≥ 75 Years: One-center Study in a Chinese Patient Group

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OBJECTIVES This study aimed to investigate clinical and perioperative characteristics of patients ≥75 years old undergoing percutaneous coronary intervention (PCI) and evaluate risk factors related to short-term mortality after PCI procedure in this specific group of patients.

METHODS 1035 consecutive subjects who underwent PCI from December 2011 to November 2013 were divided into four categories: patients with stable angina ≥75 years (N=58) and <75 years (N=218), and patients with acute coronary syndrome (ACS): ≥75 years (N=155) and <75 years (N=604). A multivariable logistic regression analysis was conducted to detect risk factors of six-month mortality in patients ≥75 years old undergoing PCI. Clinical comorbidities, in-hospital biochemical indicators, perioperative data, in-hospital and 6-month outcomes were analyzed and compared among the four groups.

RESULTS Compared with the younger group, patients ≥75 years were more likely to have hypertension (77.5% vs. 65.8%, P<0.01), history of stroke (17.8% vs. 7.2%, P<0.01), chronic obstructive pulmonary disease (8.0% vs. 2.3%, P<0.01), peripheral vascular disease (12.7% vs. 7.1%, P<0.01), cardiogenic shock (11.7% vs. 4.0%, P<0.01) and malignant arrhythmia(19.7% vs. 9.2%, P<0.01), and they were admitted into hospital with relative lower weight (63.23±8.84 vs. 69.43±10.77 P<0.01), hemoglobin (123.11±28.41 vs. 137.42±21.88 P<0.01), albumin, triglyceride, higher creatinine(85.69±30.80 vs. 75.90±37.95 P<0.01), uric acid (351.65±112.70 vs. 329.28±118.35, P<0.01), urea nitrogen(6.65±2.59 vs. 5.89±2.82 P<0.01) and pro-BNP. Multi-vessel disease (82.6% vs. 74.0%, P<0.05), calcified lesions(26.8% vs. 17.2%, P<0.01), chronic totally occlusion (9.9% vs. 6.0%, P<0.05) were also more likely to be seen in the elderly group. Univariate analysis revealed that age ≥85 years, cardiogenic shock or malignant arrhythmia at admission, emergency PCI, prior stroke and chronic kidney disease were related to six-month mortality in elderly patients ≥75 years who underwent PCI. Multivariable logistic regression showed that cardiogenic shock (OR=5.819) or malignant arrhythmia (OR=11.270) at admission, chronic kidney disease (OR=9.038) and prior stroke(OR=5.222) were independent risk factors predicting six-month mortality in elderly patients ≥75 years undergoing PCI.

CONCLUSIONS Our data shown that, in compared with patients under 75 years, elderly patients ≥75 years undergoing PCI had a relative higher risk of mortality, and more often accompanied with multi-comorbidities, severer admission conditions and complex coronary lesions. Better evaluation of risk factors and more intensively care should be taken in patients ≥75 years who receive PCI therapy to reduce complications.

GW26-e4772

Use of Radial Access in Emergency PCI

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OBJECTIVES To compare the difference of D2B time and vascular complication for emergency coronary artery interventional therapy by different artery approach selection.

METHODS Review all the emergency coronary interventional therapy patients of our hospital in 2014 year, 457 cases are included. 435 cases was completed via radial artery, 17 cases was completed via femoral artery, and the other 5 cases was completed from radial to femoral artery. D2B time and vascular complication are compared by statistics within three groups.

RESULTS The mean duration of D2B for all 457 patients is 74.13 + / - 28.34 minutes. The radial artery group show a D2B time of 73.58 + / - 31.57 minutes on average, femoral artery group show a D2B time of 78.82 + / - 26.04 minutes, and the transfer group show a D2B time of 78.40 + / - 23.39 minutes. One-way ANOVA analysis, P value is 0.754, to the three groups of patients, between any two groups there is no statistically significant differences. Vascular complications, patients with femoral artery approach in 2 cases of postoperative femoral artery pseudoaneurysms, radial artery group does not appear similar in patients with vascular complications. Fisher P value is less than 0.001, statistically significant differences.

CONCLUSIONS In general, in terms of D2B time, preferred radial artery approach is not inferior to the preferred femoral artery, but has a tendency to D2B time shorter, and the increase in vascular complications in reducing approach has the advantage of statistical significance.